


Directions: Review the information provided in the scenario. Complete the items marked as  Practice. Discuss your responses with other participants.

Tier 1 Problem Solving Practice – 7th GRADE

STEP 1 – PROBLEM/GOAL IDENTIFICATION: What do we want students to know and be able to do? What do they currently know and are they able to do?

The Mathematics PLC meets weekly to monitor learning and plan instruction for all 6th, 7th and 8th grade students. The team is comprised of all general education and special education teachers who provide math instruction as well as the Math Coach. The PLC is meeting today to review data from a recent math assessment. This particular assessment tested the mastery of **MAFS.7.NS.1.3: Solve real-world and mathematical problems involving the four operations with rational numbers**. The data enable the team to examine the percentage of students in each of the classes who have mastered the standard as well as identify individual students who may need of additional support. (See reports Q1:A and Q1:B, respectively, on next two pages of this handout)

The PLC determines that this assessment was particularly challenging for Mrs. Smith's 7th grade math class. They noted that (1) fewer than 80% of Mrs. Smith's students were able to demonstrate mastery of **MAFS.7.NS.1.3** and that (2) one particular student, **Paul**, performed below the level of many of her peers. Paul is a student with a Traumatic Brain Injury and has an active IEP.

Based on the data, the PLC recognizes the need to engage in targeted problem solving to **support and improve Mrs. Smith's universal instruction related to**. Their expectation is that these changes will increase learning for all students, including Paul.

GOAL: *80% of Mrs. Smith's students will demonstrate mastery of **MAFS.7.NS.1.3** as measured by the Quarter 2 benchmark assessment.*

Expected level of performance: *80% of students or more will demonstrate mastery*

Current level of performance: *61% of students demonstrate mastery*

Monitor Student Mastery



Standard Score Comparison The Number System
Grade 7

Q1:A

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I am viewing Comprehensive Data for Math for 2 assignment types
for all students in Gr7 Class4 at Lions Middle School using the STAR



09/29/2017

% Mastery: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

THE NUMBER SYSTEM											
MAFS.7.NS.1.1: Apply and extend previous understandings of . . .	75% 4 items										
MAFS.7.NS.1.2: Apply and extend previous understandings of mult . . .	70% 10 items										
MAFS.7.NS.1.3: Solve real-world and mathematical problems involving . . .	61% 6 items										

MASTERY CONFIDENCE



High Confidence:
Move forward with appropriate skill instruction.
Additional assessment is not necessary.



Medium Confidence:
Proceed with appropriate skill instruction, but with some degree of caution.
Additional practice/assessment will increase confidence.



Low Confidence:
More instruction/practice/assessment is required to have confidence in the Mastery Level.
Reassess following instruction/practice.



No data

MASTERY



Beginning



Developing



Secure

MASTERY %



English



Spanish

QUESTIONS ASKED

n items

NOTES

*Please go to help by clicking "?" at the top for an explanation of % Mastery, and how STAR Spanish Mastery and STAR English Mastery should be understood.

**Confidence in mastery score is determined by the amount, type, and recency of student activity for any given domain, standard, or skill.

Disclaimer: This is mock data, The PSRTI Project has no affiliation with Renaissance Learning and this data does not represent a real school but is to be used for training purposes only.

7th Grade Classroom Data Sample by Student

Q1

Q1:B

		Question Number		1	2	3	4	5	6	7	8	9	10
		Correct Answer		d	a	c	c	b	d	b	a	d	b
		Standard		MAFS.7.NS.1.3 Understand	MAFS.7.NS.1.1 Apply	MAFS.7.NS.1.3 Apply	MAFS.7.NS.1.2 Understand	MAFS.7.NS.1.3 Describe	MAFS.7.NS.1.3 Apply	MAFS.7.NS.1.1 Understand	MAFS.7.NS.1.1 Describe	MAFS.7.NS.1.2 Apply	MAFS.7.NS.1.2 Understand
First Name	Last Name	Multiple Choice	Overall Proficiency	1	2	3	4	5	6	7	8	9	10
Kate	Smith	70%	70%				d			c		b	
Amber	Giles	100%	100%										
Kendra	Jones	80%	80%			a				c			
Miguel	Alba	90%	90%							c			
Paul	Bell	30%	30%		d	b		a	a	d		c	a
Amy	Milk	70%	70%		b				c		b		
Daniel	Peck	60%	60%	c	b		c						c
Chris	Wynn	80%	80%	c							c		
Lola	Lang	40%	40%	b	d	a	d			d		b	
Rob	Heart	50%	50%			a	c	a	c				d
Gabe	Snipe	100%	100%										
Cassy	Dole	60%	60%			b		c	c	d			
Nicole	Smith	80%	80%							c		c	
Lindsy	Doll	70%	70%				d			c		b	
Tyler	Miles	30%	30%		b	b		c	a	c	b	c	
Percentage correct		67%	67%	80%	67%	67%	67%	74%	67%	40%	80%	60%	80%

STEP 2 – PROBLEM ANALYSIS: Why is the desired goal not occurring?

*The team generated several hypotheses and corresponding prediction statements across multiple domains (Instruction, Curriculum, Environment, Learner) in order to determine **why** the problem was occurring.*

Hypothesis 1 Curriculum: The problem is occurring because the curriculum does not include the targeted skill.

Prediction Statement: If the curriculum was changed to include the target skill, then the problem would be reduced.

Hypothesis 2 Learner: The problem is occurring because the students lack the prerequisite skill necessary to master the skill.

Prediction Statement: If the students were provided instructional scaffolds for the prerequisite skills, then the problem would be reduced.

Hypothesis 3 Environment: The problem is occurring because the environment lacks the structure necessary for effective universal instruction.

Prediction Statement: If instructional routines are established and reinforced, then the problem would be reduced.



Practice: *Develop a hypothesis and corresponding prediction statement for the domain of instruction. (See ICEL UDL Crosswalk and ICEL UDL Instruction Handout for elements related to the domain of Instruction and **ideas for universal design.**)*

Hypothesis 1 - Instruction: The problem is occurring because

Prediction Statement: If

, then the problem would be reduced.

Step 4 –RESPONSE TO INSTRUCTION: Is it working?

The team examined the Quarter 2 assessment data (see Reports Q2:A and Q2:B that follow) and used their pre-established decision rules to determine the student response and plan next steps. The progress monitoring results are indicated below

Decision rules:

80-100% = Positive response

60-79% = Questionable response

0-59% = Poor response



Practice: Using the team pre-established decision rules, examine the data above, determine if student response is positive, questionable or poor and recommend next steps.

1. Was the student response positive, questionable or poor? _____

2. What would you recommend as next steps for Mrs. Smith?

Monitor Student Mastery



Standard Score Comparison The Number System

Grade 7

Q2:A

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I am viewing [Comprehensive Data](#) for [Math](#) for [2 assignment types](#) for all students in [Gr7 Class4](#) at [Lions Middle School](#) using the [STAR](#)

10/25/2017

% Mastery: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

THE NUMBER SYSTEM											
MAFS.7.NS.1.1: Apply and extend previous understandings of . . .	70% 5 items									70%	
MAFS.7.NS.1.2: Apply and extend previous understandings of mult . . .	67% 8 items									67%	
MAFS.7.NS.1.3: Solve real-world and mathematical problems involving . . .	65% 7 items									65%	

MASTERY CONFIDENCE



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Move forward with appropriate skill instruction.
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No data

MASTERY



Beginning



Developing



Secure

MASTERY %



English



Spanish

QUESTIONS ASKED

n items

NOTES

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7th Grade Classroom Data Sample by Student

Q2

Q2:B

		Question Number		1	2	3	4	5	6	7	8	9	10
		Correct Answer		b	c	a	d	c	a	c	c	b	d
		Standard		MAFS.7.NS.1.2 Understand	MAFS.7.NS.1.3 Understand	MAFS.7.NS.1.1 Apply	MAFS.7.NS.1.3 Apply	MAFS.7.NS.1.2 Understand	MAFS.7.NS.1.3 Describe	MAFS.7.NS.1.3 Apply	MAFS.7.NS.1.1 Understand	MAFS.7.NS.1.1 Describe	MAFS.7.NS.1.2 Apply
First Name	Last Name	Multiple Choice	Overall Proficiency	1	2	3	4	5	6	7	8	9	10
Kate	Smith	80%	80%		d						a		
Amber	Giles	90%	90%								d		
Kendra	Jones	80%	80%	a							a		
Miguel	Alba	90%	90%								a		
Paul	Bell	40%	40%	d	b			a	c			c	a
Amy	Milk	70%	70%		a	c			b				
Daniel	Peck	70%	70%			b		b				d	
Chris	Wynn	90%	90%								d		
Lola	Lang	40%	40%	d	d	c	b			d		d	
Rob	Heart	50%	50%			d	c	a	c				c
Gabe	Snipe	100%	100%										
Cassy	Dole	60%	60%			b		c	c	d			
Nicole	Smith	90%	90%									c	
Lindsy	Doll	60%	60%				c			d	d	a	
Tyler	Miles	30%	30%		b	b	a		b	b	b	c	
Percentage correct		69%	69%	80%	67%	60%	74%	74%	67%	74%	54%	60%	87%

Rtl Outcome Decision Tree

Decision rules:

80-100% = Positive response

60-79% = Questionable response

0-59% = Poor response

If the outcome is:

